

EROSION CONTROL NARRATIVE

1.1 PROJECT DESCRIPTION

THIS PROJECT INVOLVES THE REHABILITATION OF THE "COMMUNITY CENTER" BRIDGE (VT 11 OVER THE BLACK RIVER). THE EXISTING TWO SPAN ROLLED BEAM BRIDGE WILL BE REHABILITATED INCLUDING A NEW DECK AT SIDEWALKS, NEW STEEL GIRDERS, CONCRETE DECK, AND SIDEWALKS AND BRIDGE RAILING. THE WORK WILL BE COMPLETED BY DETOURING EASTBOUND TRAFFIC AND ALLOWING WESTBOUND TRAFFIC TO TRAVEL ON THE BRIDGE. THE WORK WILL BE COMPLETED IN A PHASED CONSTRUCTION SEQUENCE. THE EXISTING ABUTMENTS, WINGWALLS AND PIER WILL REMAIN IN PLACE WITH MINOR REPAIRS MADE TO THE BRIDGE SEATS.

THERE WILL BE NO WORK IN THE CHANNEL AND THE ROADWAY WORK WILL BE VERY MINIMAL. ALL WORK WILL STAY WITHIN THE EXISTING RIGHT OF WAY.

TOTAL AREA OF DISTURBANCE IS APPROXIMATELY 0.48 ACRES.

IT IS ANTICIPATED THAT THIS PROJECT WILL LAST ONE CONSTRUCTION SEASON.

1.2 SITE INVENTORY

1.2.1 OFF SITE DRAINAGE CHARACTERISTICS (UP AND DOWN-GRADIENT)

THIS BRIDGE LIES WITHIN AN URBAN SETTING CONSISTING OF SIDEWALKS, DRIVE ENTRANCES TO PARKING LOTS AND A SMALL PARK.

1.2.2 DRAINAGE, WATERWAYS, BODIES OF WATER, AND PROXIMITY TO NATURAL OR MAN-MADE WATER FEATURES

THE BLACK RIVER IS THE ONLY WATER SOURCE ON THE PROJECT SITE. THERE ARE NO OTHER WATER BODIES OR WETLANDS WITHIN THE PROJECT AREA. THE BLACK RIVER IS A STRAIGHT, NOT BRAIDED AND A NON ANABRANCH WATER WAY. THERE ARE MULTIPLE DAMS UPSTREAM OF THE BRIDGE. THERE ARE A FEW DROP INLETS ON SITE DRAINING FROM THE ROADWAY TO THE RIVER.

1.2.3 TOPOGRAPHY, EXISTING ROADS, BUILDINGS, UTILITIES

THE TOPOGRAPHY OF THE PROJECT SITE IS FLAT, HOWEVER THERE ARE TWO STEEP PAVED DRIVES AT NORTHWEST CORNER AND AT THE NORTHEAST CORNER OF THE PROJECT. AT THE SOUTHERN END OF THE PROJECT THERE IS AN INTERSECTION WHERE BOTH SOUTH STREET AND MINERAL STREET MEET WITH VT 11.

BUILDINGS AROUND THE PROJECT INCLUDE THE COMMUNITY CENTER BUILDING ON THE NORTHWEST CORNER OF THE BRIDGE, A CHURCH AT THE TOP OF THE HILL ON THE NORTHEAST CORNER. ON THE SOUTHWEST CORNER IS A LARGE SENIOR CITIZENS HOME, AND ON THE SOUTHEAST CORNER IS A PARKING LOT TO AN ADJACENT RESTAURANT.

UTILITIES ON AND AROUND THIS PROJECT INCLUDE: POWER AND UTILITY POLES RUN ALONG MAINLINE AND CROSS THE RIVER DOWNSTREAM OF THE BRIDGE. SEWER, WATER, AND UNDERGROUND TELEPHONE CROSS UNDER THE BRIDGE AND ARE PRESENT UNDERGROUND ALONG THE LENGTH OF THE PROJECT.

1.2.4 VEGETATION

THE VEGETATION IN THE PROJECT AREA IS VERY MINIMAL. THE ONLY AREA OF IMPACT IS THE NORTH EAST WINGWALL WHERE APPROACH RAILING WILL BE PLACED NEXT TO THE SIDEWALK AND SOME GRASS WILL BE DISTURBED. ALL VEGETATED AREAS THAT ARE DISTURBED WILL BE REESTABLISHED WITH STANDARD SEED AND MULCH PRACTICES.

1.2.5 SOILS

ALL SOIL DATA CAME FROM THE U.S. DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE FOR THE COUNTY OF WINDSOR, VERMONT. SOILS ON THE PROJECT SITE CONSIST OF URBAN LAND-WINDSOR-AGAWAM COMPLEX, 0 - 8 PERCENT SLOPES. THE AGAWAM PORTION OF THIS COMPLEX HAS A Kw OF 0.28 FROM 0-9 INCHES, 0.37 FROM 9-26 INCHES, 0.17 FROM 26-35 INCHES, AND 0.10 FROM 35-65 INCHES. THE WINDSOR PORTION OF THIS COMPLEX HAS A Kw OF 0.17 TO 0.10 FOR ITS DEPTH. AS SIGNIFICANT PORTIONS OF THIS PROJECT WILL BE CONSTRUCTED IN PREVIOUSLY DISTURBED AREAS IN THIS URBAN SETTING, IT WILL BE IMPORTANT TO NOTE WHETHER NATIVE MATERIAL OR PREVIOUSLY PLACED GRAVEL BACKFILL WILL BE EXPOSED AS THE PROJECT PROGRESSES.

NOTE: K-VALUES GENERALLY INDICATE THE FOLLOWING: 0.0-0.23 = LOW EROSION POTENTIAL; 0.24-0.36 = MODERATE EROSION POTENTIAL; 0.37 AND HIGHER = HIGH EROSION POTENTIAL.

1.2.6 SENSITIVE RESOURCE AREAS

CRITICAL HABITATS: NO
HISTORICAL AREA: THE ENTIRE BRIDGE IS LOCATED IN A HISTORIC DISTRICT.
ARCHEOLOGICAL AREAS: NO

PRIME AGRICULTURAL LAND: NO
THREATENED AND ENDANGERED SPECIES: NO
WATER RESOURCE: BLACK RIVER
WETLANDS: NO

1.3 RISK EVALUATION

THIS PROJECT DOES NOT FALL UNDER THE JURISDICTION OF CONSTRUCTION GENERAL PERMIT 3-9020 BASED ON THE PROJECT IMPACT AREA. SHOULD CHANGES PRIOR TO OR DURING CONSTRUCTION RESULT IN ONE OR MORE ACRES OF EARTH DISTURBANCE OR SHOULD THE PROJECT BECOME PART OF A LARGER PLAN OF DEVELOPMENT, THEN THE SELECTED CONTRACTOR WILL BE RESPONSIBLE FOR ADDITIONAL PERMITTING WITH VANR VIA FILING OF THE APPROPRIATE NOTICE OF INTENT UNDER THE CONSTRUCTION GENERAL PERMIT PROCESS.

1.4 EROSION PREVENTION AND SEDIMENT CONTROL

THE EROSION CONTROL PLANS ARE MEANT AS A GUIDELINE FOR PREVENTING EROSION AND CONTROLLING SEDIMENT TRANSPORT. THE WORK OUTLINED IN THIS NARRATIVE CONSISTS OF APPLYING MEASURES THROUGHOUT THE LIFE OF THE PROJECT MINIMIZING SEDIMENT TRANSPORT TO THE RECEIVING WATERS. THE MEASURES INCLUDE STABILIZATION AND STRUCTURAL PRACTICES, STORM WATER CONTROLS AND OTHER POLLUTION PREVENTION CONTROLS.

PREVENTING INITIAL SOIL EROSION IS MUCH MORE EFFECTIVE THAN TREATING ERODED SEDIMENT. MAINTAINING VEGETATED BUFFERS ALONG STREAM BANKS, WETLANDS OR OTHER SENSITIVE AREAS IS A CRUCIAL EROSION AND SEDIMENT CONTROL MEASURE THAT SHOULD BE ESTABLISHED WHEREVER POSSIBLE.

ALL MEASURES SHALL BE REGULARLY MAINTAINED AND SHALL BE CHECKED FOR SEDIMENT BUILD-UP. SEDIMENT SHALL BE DISPOSED AT AN APPROVED SITE WHERE IT WILL NOT BE SUBJECT TO EROSION.

(REFER TO THE LOW RISK SITE HANDBOOK AND APPROPRIATE DETAIL SHEETS FOR EACH PRACTICE REQUIRED ON THE PROJECT TO INCLUDE BUT NOT LIMITED TO THE FOLLOWING.)

1.4.1 MARK SITE BOUNDARIES

PROJECT DEMARCATION FENCING, DENOTED -PDF- ON THE PLANS IS USED TO DELINEATE THE LIMITS THAT THE CONTRACTOR CAN ACCESS WITH CONSTRUCTION EQUIPMENT. THIS MEASURE LIMITS THE AREA THAT CAN BE DISTURBED AND EXPOSED TO EROSION.

1.4.2 LIMIT DISTURBANCE AREA

EMPLOY TEMPORARY STABILIZATION PRACTICES IN INCREMENTAL STAGES (PHASING) AS CONSTRUCTION PROCEEDS. ADDITIONAL MEASURES MAY BE NEEDED DUE TO THE PHASING OF THE PROJECT AND AS DIRECTED BY THE ENGINEER.

1.4.3 STABILIZE CONSTRUCTION EXIT

STABILIZED CONSTRUCTION ENTRANCE SHALL BE UTILIZED AS NECESSARY.

1.4.4 INSTALL SILT FENCE

SILT FENCE SHALL BE INSTALLED PRIOR TO ANY UP SLOPE WORK AS SHOWN ON THE PLANS OR AS NECESSARY.

1.4.5 DIVERT UPLAND RUNOFF

SWALE (STORM WATER FROM STREET COLLECTIONS DRAINAGE SYSTEM)

1.4.6 SLOW DOWN CHANNELIZED RUNOFF

N/A

1.4.7 CONSTRUCT PERMANENT CONTROLS

SEED AND MULCH
DRAINAGE INLETS AND PIPING

1.4.8 STABILIZE EXPOSED SOILS

SEED AND MULCH

1.4.9 WINTER STABILIZATION (IF NECESSARY)

VARIOUS MEASURES SPECIFIC TO WINTER (SEE LOW RISK HANDBOOK)

1.4.10 STABILIZE SOIL AT FINAL GRADE

SEED AND MULCH

1.4.11 DEWATERING ACTIVITIES

N/A

1.4.12 INSPECT YOUR SITE

INSPECT SITE BASED ON PERMIT AUTHORIZATION OR SPECIAL PROVISION REQUIREMENTS.

PROJECT NAME: SPRINGFIELD

PROJECT NUMBER: BHF 016-2(14)

FILE NAME: 06J004/str/s06J004ecnar.dgn PLOT DATE: 04-MAR-2009

PROJECT LEADER: R. WHITCOMB

DRAWN BY: C. CARLSON

DESIGNED BY: C. CARLSON

CHECKED BY: D. PETERSON

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